

*On the Intercellular Matter and the Vessels of the Latex in the Root of the Dandelion.* By Dr. A. VOGEL.

The back of the root of the Dandelion is traversed by a great number of lactiferous vessels containing a very abundant bluish-white milk. These vessels form a great number of larger or smaller bundles disposed in a tolerably regular concentric manner, and united to each other by numerous ramifications. The ramifications are always parallel to the surface of the root, so that the bundles form concentric sheaths independent of each other. The outermost peridermic layer of the bark, however, is destitute of lactiferous vessels, which exist chiefly in the inner portion. The cellular parenchyma of these two parts of the bark contains a great quantity of intercellular matters, especially in the vicinity of the lactiferous vessels.

According to the author, the lactiferous vessels originate by the union of conductive cells (*Leitzellen*), of which the adjacent septa become gradually converted into pectose, and finally disappear. He has detected many intermediate stages, which leave him no doubt as to this mode of formation of the vessels. According to him, the lateral walls of these same cells likewise finally become converted into pectose; so that the fully developed lactiferous vessels are not formed by a cellulose membrane.

It was by observing the action of iodized liquids, acids, and alkalis upon the substance forming the envelope of the lactiferous vessels, that Dr. Vogel was led to regard it as cellulose in progress of conversion into pectose. He arrived at the same results by setting the same reagents in action upon the intercellular matter of the Dandelion-root, which he also regards as pectose produced by the gradual transformation of the membrane of cells.—*Bericht Akad. Wiss. in Wien; Bibl. Univ.* 1865, *Bull. Sci.* p. 239.

*On the Structure of the Luminous Organs in the Male of Lampyris splendidula.* By M. SCHULTZE.

The author has found that the numerous branches of the tracheæ in the luminous organs of *Lampyris splendidula* terminate each in a small cell of stellate form. Under the action of osmic acid these cells rapidly acquire a black tinge, whilst the cells of the parenchyma remain uncoloured. These cells therefore readily reduce the osmic acid by absorbing its oxygen; and the author attributes to them an important part in the production of the phenomenon of phosphorescence by this insect.—*Sitzung der Niederrhein. Ges. für Natur- und Heilkunde zu Bonn*, 1864; *Bibl. Univ.* 1865, *Bull. Sci.* p. 232.

*De Jeude's Collection of Mollusca.*

The fine collection of Mollusca formed by the late Prof. Lithe de Jeude, for many years Professor of Zoology in the University of Utrecht, has been purchased by Mr. Damon (of Weymouth). The collection, rich in the rare shells of the Moluccas, was displayed in 140 glass cabinets, and formed one of the chief scientific attractions in the city of Utrecht.